

브러쉬 페인팅

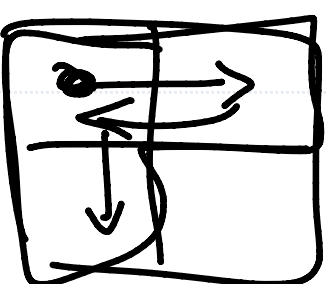
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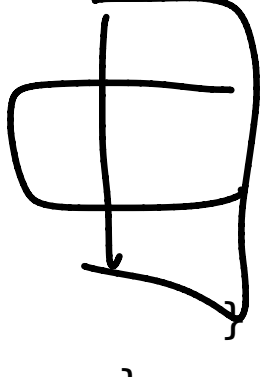
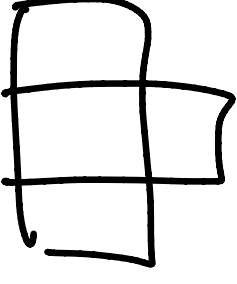
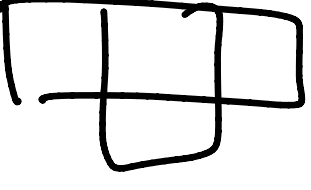
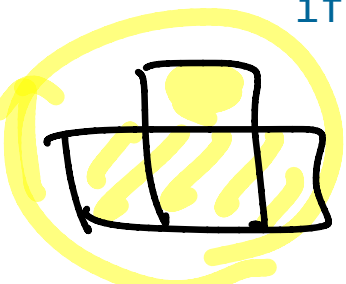
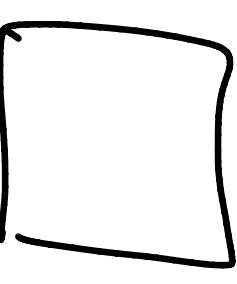


C++14

```
1 #include <iostream>
2 using namespace std;
3 int a[500][500];
4 bool c[500][500];
5 int n, m;
6 int dx[] = {0,0,1,-1};
7 int dy[] = {1,-1,0,0};
8 int ans = 0;
9 void go(int x, int y, int sum, int cnt) {
10     if (cnt == 4) {
11         if (ans < sum) ans = sum;
12         return;
13     }
14     if (x < 0 || x >= n || y < 0 || y >= m) return;
15     if (c[x][y]) return;
16     c[x][y] = true;
17     for (int k=0; k<4; k++) {
18         go(x+dx[k], y+dy[k], sum+a[x][y], cnt+1);
19     }
20     c[x][y] = false;
21 }
22 int main() {
23     cin >> n >> m;
24     for (int i=0; i<n; i++) {
25         for (int j=0; j<m; j++) {
26             cin >> a[i][j];
27         }
28     }
29     for (int i=0; i<n; i++) {
30         for (int j=0; j<m; j++) {
31             go(i, j, 0, 0);
32             if (j+2 < m) {
33                 int temp = a[i][j] + a[i][j+1] + a[i][j+2];
34                 if (i-1 >= 0) {
35                     int temp2 = temp + a[i-1][j+1];
36                     if (ans < temp2) ans = temp2;
37                 }
38                 if (i+1 < n) {
39                     int temp2 = temp + a[i+1][j+1];
40                     if (ans < temp2) ans = temp2;
41                 }
42             }
43             if (i+2 < n) {
44                 int temp = a[i][j] + a[i+1][j] + a[i+2][j];
45                 if (j+1 < m) {
46                     int temp2 = temp + a[i+1][j+1];
47                     if (ans < temp2) ans = temp2;
48                 }
49                 if (j-1 >= 0) {
50                     int temp2 = temp + a[i+1][j-1];
51                     if (ans < temp2) ans = temp2;
52                 }
53             }
54         }
55     }
56     cout << ans << '\n';
57     return 0;
58 }
59
```



(x, y)



(i, j)

결과	메모리	시간	코드 길이
맞았습니다!!	3208 KB	184 ms	1618 B

Java

```
1 import java.util.*;
2 public class Main {
3     static int[][] a;
4     static boolean[][] c;
5     static int n, m;
6     static int[] dx = {0,0,1,-1};
7     static int[] dy = {1,-1,0,0};
8     static int ans = 0;
9     static void go(int x, int y, int sum, int cnt) {
10         if (cnt == 4) {
11             if (ans < sum) ans = sum;
12             return;
13         }
14         if (x < 0 || x >= n || y < 0 || y >= m) return;
15         if (c[x][y]) return;
16         c[x][y] = true;
17         for (int k=0; k<4; k++) {
18             go(x+dx[k], y+dy[k], sum+a[x][y], cnt+1);
19         }
20         c[x][y] = false;
21     }
22     public static void main(String[] args) {
23         Scanner sc = new Scanner(System.in);
24         n = sc.nextInt();
25         m = sc.nextInt();
26         a = new int[n][m];
27         c = new boolean[n][m];
28         for (int i=0; i<n; i++) {
29             for (int j=0; j<m; j++) {
30                 a[i][j] = sc.nextInt();
31             }
32         }
33         for (int i=0; i<n; i++) {
34             for (int j=0; j<m; j++) {
35                 go(i, j, 0, 0);
36                 if (j+2 < m) {
37                     int temp = a[i][j] + a[i][j+1] + a[i][j+2];
38                     if (i-1 >= 0) {
39                         int temp2 = temp + a[i-1][j+1];
40                         if (ans < temp2) ans = temp2;
41                     }
42                     if (i+1 < n) {
43                         int temp2 = temp + a[i+1][j+1];
44                         if (ans < temp2) ans = temp2;
45                     }
46                 }
47                 if (i+2 < n) {
48                     int temp = a[i][j] + a[i+1][j] + a[i+2][j];
49                     if (j+1 < m) {
50                         int temp2 = temp + a[i+1][j+1];
51                         if (ans < temp2) ans = temp2;
52                     }
53                     if (j-1 >= 0) {
54                         int temp2 = temp + a[i+1][j-1];
55                         if (ans < temp2) ans = temp2;
56                     }
57                 }
58             }
59         }
60         System.out.println(ans);
61     }
62 }
63
```

결과	메모리	시간	코드 길이
맞았습니다!!	86808 KB	1152 ms	2041 B

C++14

```
1 #include <iostream>
2 #include <vector>
3 #include <algorithm>
4 using namespace std;
5 int s[20][20];
6 int n;
7 int go(int index, vector<int> &first, vector<int> &second) {
8     if (index == 0) {
9         if (first.size() == 0) return -1;
10        if (second.size() == 0) return -1;
11        int t1 = 0;
12        int t2 = 0;
13        for (int i=0; i<first.size(); i++) {
14            for (int j=0; j<first.size(); j++) {
15                if (i == j) continue;
16                t1 += s[first[i]][first[j]];
17            }
18        }
19        for (int i=0; i<second.size(); i++) {
20            for (int j=0; j<second.size(); j++) {
21                if (i == j) continue;
22                t2 += s[second[i]][second[j]];
23            }
24        }
25        int diff = t1-t2;
26        if (diff < 0) diff = -diff;
27        return diff;
28    }
29    int ans = -1;
30    first.push_back(index);
31    int t1 = go(index+1, first, second);
32    if (ans == -1 || (t1 != -1 && ans > t1)) {
33        ans = t1;
34    }
35    first.pop_back();
36    second.push_back(index);
37    int t2 = go(index+1, first, second);
38    if (ans == -1 || (t2 != -1 && ans > t2)) {
39        ans = t2;
40    }
41    second.pop_back();
42    return ans;
43 }
44 int main() {
45     cin >> n;
46     for (int i=0; i<n; i++) {
47         for (int j=0; j<n; j++) {
48             cin >> s[i][j];
49         }
50     }
51     vector<int> first, second;
52     cout << go(0, first, second) << '\n';
53 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	224 ms	1429 B

Java

```
1 import java.util.*;
2 public class Main {
3     static int[][] s;
4     static int n;
5     static int go(int index, ArrayList<Integer> first, ArrayList<Integer> second) {
6         if (index == n) {
7             if (first.size() == 0) return -1;
8             if (second.size() == 0) return -1;
9             int t1 = 0;
10            int t2 = 0;
11            for (int i=0; i<first.size(); i++) {
12                for (int j=0; j<first.size(); j++) {
13                    if (i == j) continue;
14                    t1 += s[first.get(i)][first.get(j)];
15                }
16            }
17            for (int i=0; i<second.size(); i++) {
18                for (int j=0; j<second.size(); j++) {
19                    if (i == j) continue;
20                    t2 += s[second.get(i)][second.get(j)];
21                }
22            }
23            int diff = Math.abs(t1-t2);
24            return diff;
25        }
26        int ans = -1;
27        first.add(index);
28        int t1 = go(index+1, first, second);
29        if (ans == -1 || (t1 != -1 && ans > t1)) {
30            ans = t1;
31        }
32        first.remove(first.size()-1);
33        second.add(index);
34        int t2 = go(index+1, first, second);
35        if (ans == -1 || (t2 != -1 && ans > t2)) {
36            ans = t2;
37        }
38        second.remove(second.size()-1);
39        return ans;
40    }
41    public static void main(String[] args) {
42        Scanner sc = new Scanner(System.in);
43        n = sc.nextInt();
44        s = new int[n][n];
45        for (int i=0; i<n; i++) {
46            for (int j=0; j<n; j++) {
47                s[i][j] = sc.nextInt();
48            }
49        }
50        ArrayList<Integer> first = new ArrayList<>();
51        ArrayList<Integer> second = new ArrayList<>();
52        System.out.println(go(0, first, second));
53    }
54 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	25036 KB	1244 ms	1809 B

C++14

```
1 #include <iostream>
2 #include <queue>
3 using namespace std;
4 int n, m;
5 int a[10][10];
6 int b[10][10];
7 int dx[] = {0,0,1,-1};
8 int dy[] = {1,-1,0,0};
9 int bfs() {
10     queue<pair<int,int>> q;
11     for (int i=0; i<n; i++) {
12         for (int j=0; j<m; j++) {
13             b[i][j] = a[i][j];
14             if (b[i][j] == 2) {
15                 q.push(make_pair(i,j));
16             }
17         }
18     }
19     while (!q.empty()) {
20         int x = q.front().first;
21         int y = q.front().second;
22         q.pop();
23         for (int k=0; k<4; k++) {
24             int nx = x+dx[k];
25             int ny = y+dy[k];
26             if (0 <= nx && nx < n && 0 <= ny && ny < m) {
27                 if (b[nx][ny] == 0) {
28                     b[nx][ny] = 2;
29                     q.push(make_pair(nx,ny));
30                 }
31             }
32         }
33     }
34     int cnt = 0;
35     for (int i=0; i<n; i++) {
36         for (int j=0; j<m; j++) {
37             if (b[i][j] == 0) {
38                 cnt += 1;
39             }
40         }
41     }
42     return cnt;
43 }
44 int main() {
45     cin >> n >> m;
46     for (int i=0; i<n; i++) {
47         for (int j=0; j<m; j++) {
48             cin >> a[i][j];
49         }
50     }
51     int ans = 0;
52     for (int x1=0; x1<n; x1++) {
53         for (int y1=0; y1<m; y1++) {
54             if (a[x1][y1] != 0) continue;
55             for (int x2=0; x2<n; x2++) {
56                 for (int y2=0; y2<m; y2++) {
57                     if (a[x2][y2] != 0) continue;
58                     for (int x3=0; x3<n; x3++) {
59                         for (int y3=0; y3<m; y3++) {
60                             if (a[x3][y3] != 0) continue;
61                             if (x1 == x2 && y1 == y2) continue;
62                             if (x1 == x3 && y1 == y3) continue;
63                             if (x2 == x3 && y2 == y3) continue;
64                             a[x1][y1] = 1;
65                             a[x2][y2] = 1;
66                             a[x3][y3] = 1;
67                             int cur = bfs();
68                             if (ans < cur) ans = cur;
69                             a[x1][y1] = 0;
70                             a[x2][y2] = 0;
71                             a[x3][y3] = 0;
72                         }
73                     }
74                 }
75             }
76         }
77     }
78     cout << ans << '\n';
79     return 0;
80 }
```

여기

이런 영

2

(x,y) → (nx,ny)

(x1,y1)

x2,y2

x3,y3

결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	256 ms	2246 B

Java

```
1 import java.util.*;
2 class Pair {
3     int x;
4     int y;
5     Pair(int x, int y) {
6         this.x = x;
7         this.y = y;
8     }
9 }
10 public class Main {
11     static int n, m;
12     static int[][] a = new int[10][10];
13     static int[][] b = new int[10][10];
14     static int[] dx = {0,0,1,-1};
15     static int[] dy = {1,-1,0,0};
16     static int bfs() {
17         Queue<Pair> q = new LinkedList<Pair>();
18         for (int i=0; i<n; i++) {
19             for (int j=0; j<m; j++) {
20                 b[i][j] = a[i][j];
21                 if (b[i][j] == 2) {
22                     q.add(new Pair(i, j));
23                 }
24             }
25         }
26         while (!q.isEmpty()) {
27             Pair p = q.remove();
28             int x = p.x;
29             int y = p.y;
30             for (int k=0; k<4; k++) {
31                 int nx = x+dx[k];
32                 int ny = y+dy[k];
33                 if (0 <= nx && nx < n && 0 <= ny && ny < m) {
34                     if (b[nx][ny] == 0) {
35                         b[nx][ny] = 2;
36                         q.add(new Pair(nx, ny));
37                     }
38                 }
39             }
40         }
41         int cnt = 0;
42         for (int i=0; i<n; i++) {
43             for (int j=0; j<m; j++) {
44                 if (b[i][j] == 0) {
45                     cnt += 1;
46                 }
47             }
48         }
49         return cnt;
50     }
51     public static void main(String[] args) {
52         Scanner sc = new Scanner(System.in);
53         n = sc.nextInt();
54         m = sc.nextInt();
55         a = new int[n][m];
56         for (int i=0; i<n; i++) {
57             for (int j=0; j<m; j++) {
58                 a[i][j] = sc.nextInt();
59             }
60         }
61         int ans = 0;
62         for (int x1=0; x1<n; x1++) {
63             for (int y1=0; y1<m; y1++) {
64                 if (a[x1][y1] != 0) continue;
65                 for (int x2=0; x2<n; x2++) {
66                     for (int y2=0; y2<m; y2++) {
67                         if (a[x2][y2] != 0) continue;
68                         for (int x3=0; x3<n; x3++) {
69                             for (int y3=0; y3<m; y3++) {
70                                 if (a[x3][y3] != 0) continue;
71                                 if (x1 == x2 && y1 == y2) continue;
72                                 if (x1 == x3 && y1 == y3) continue;
73                                 if (x2 == x3 && y2 == y3) continue;
74                                 a[x1][y1] = 1;
75                                 a[x2][y2] = 1;
76                                 a[x3][y3] = 1;
77                                 int cur = bfs();
78                                 if (ans < cur) ans = cur;
79                                 a[x1][y1] = 0;
80                                 a[x2][y2] = 0;
81                                 a[x3][y3] = 0;
82                             }
83                         }
84                     }
85                 }
86             }
87         }
88         System.out.println(ans);
89     }
90 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	148728 KB	672 ms	2842 B

C++14

```
1 #include <iostream>
2 #include <queue>
3 using namespace std;
4 int n, m;
5 int a[10][10];
6 int b[10][10];
7 int dx[] = {0,0,1,-1};
8 int dy[] = {1,-1,0,0};
9 void dfs(int x, int y) {
10     for (int k=0; k<4; k++) {
11         int nx = x+dx[k];
12         int ny = y+dy[k];
13         if (0 <= nx && nx < n && 0 <= ny && ny < m) {
14             if (b[nx][ny] == 0) {
15                 b[nx][ny] = 2;
16                 dfs(nx,ny);
17             }
18         }
19     }
20 }
21 int dfs() {
22     for (int i=0; i<n; i++) {
23         for (int j=0; j<m; j++) {
24             b[i][j] = a[i][j];
25         }
26     }
27     for (int i=0; i<n; i++) {
28         for (int j=0; j<m; j++) {
29             if (b[i][j] == 2) {
30                 dfs(i, j);
31             }
32         }
33     }
34     int cnt = 0;
35     for (int i=0; i<n; i++) {
36         for (int j=0; j<m; j++) {
37             if (b[i][j] == 0) {
38                 cnt += 1;
39             }
40         }
41     }
42     return cnt;
43 }
44 int main() {
45     cin >> n >> m;
46     for (int i=0; i<n; i++) {
47         for (int j=0; j<m; j++) {
48             cin >> a[i][j];
49         }
50     }
51     int ans = 0;
52     for (int x1=0; x1<n; x1++) {
53         for (int y1=0; y1<m; y1++) {
54             if (a[x1][y1] != 0) continue;
55             for (int x2=0; x2<n; x2++) {
56                 for (int y2=0; y2<m; y2++) {
57                     if (a[x2][y2] != 0) continue;
58                     for (int x3=0; x3<n; x3++) {
59                         for (int y3=0; y3<m; y3++) {
60                             if (a[x3][y3] != 0) continue;
61                             if (x1 == x2 && y1 == y2) continue;
62                             if (x1 == x3 && y1 == y3) continue;
63                             if (x2 == x3 && y2 == y3) continue;
64                             a[x1][y1] = 1;
65                             a[x2][y2] = 1;
66                             a[x3][y3] = 1;
67                             int cur = dfs();
68                             if (ans < cur) ans = cur;
69                             a[x1][y1] = 0;
70                             a[x2][y2] = 0;
71                             a[x3][y3] = 0;
72                         }
73                     }
74                 }
75             }
76         }
77     }
78     cout << ans << '\n';
79     return 0;
80 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	256 ms	2143 B

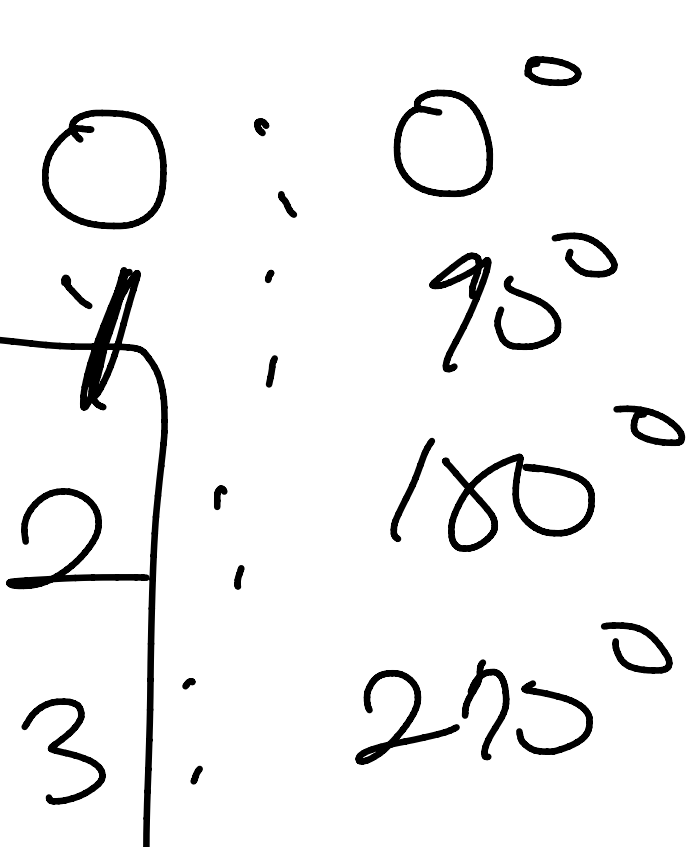
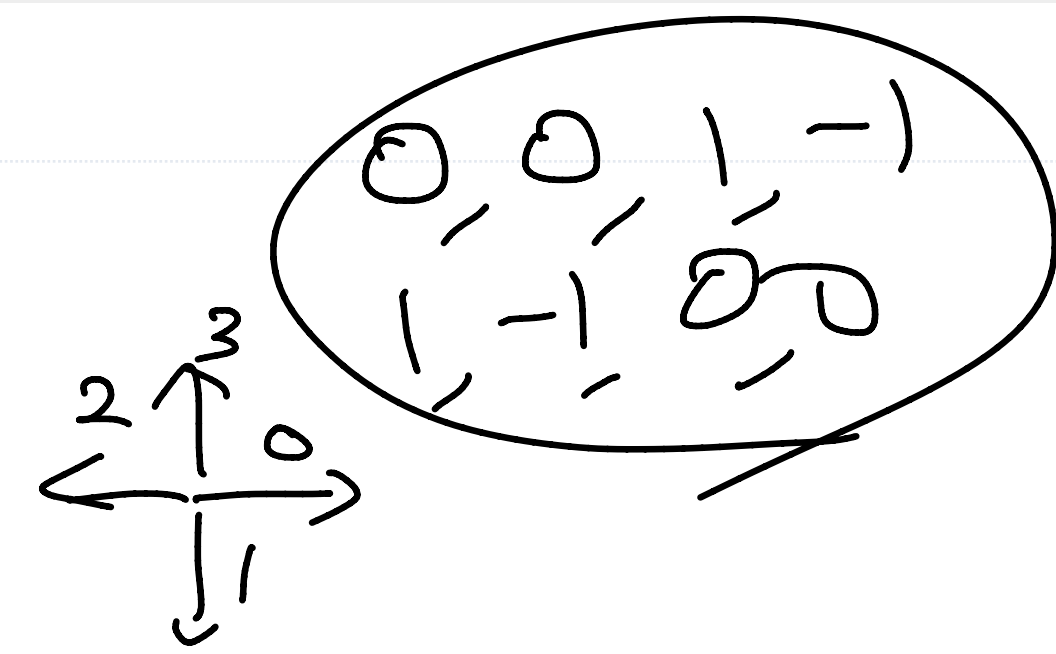
Java

```
1 import java.util.*;
2 class Pair {
3     int x;
4     int y;
5     Pair(int x, int y) {
6         this.x = x;
7         this.y = y;
8     }
9 }
10 public class Main {
11     static int n, m;
12     static int[][] a = new int[10][10];
13     static int[][] b = new int[10][10];
14     static int[] dx = {0,0,1,-1};
15     static int[] dy = {1,-1,0,0};
16     static void dfs(int x, int y) {
17         for (int k=0; k<4; k++) {
18             int nx = x+dx[k];
19             int ny = y+dy[k];
20             if (0 <= nx && nx < n && 0 <= ny && ny < m) {
21                 if (b[nx][ny] == 0) {
22                     b[nx][ny] = 2;
23                     dfs(nx,ny);
24                 }
25             }
26         }
27     }
28     static int dfs() {
29         for (int i=0; i<n; i++) {
30             for (int j=0; j<m; j++) {
31                 b[i][j] = a[i][j];
32             }
33         }
34         for (int i=0; i<n; i++) {
35             for (int j=0; j<m; j++) {
36                 if (b[i][j] == 2) {
37                     dfs(i, j);
38                 }
39             }
40         }
41         int cnt = 0;
42         for (int i=0; i<n; i++) {
43             for (int j=0; j<m; j++) {
44                 if (b[i][j] == 0) {
45                     cnt += 1;
46                 }
47             }
48         }
49         return cnt;
50     }
51     public static void main(String[] args) {
52         Scanner sc = new Scanner(System.in);
53         n = sc.nextInt();
54         m = sc.nextInt();
55         a = new int[n][m];
56         for (int i=0; i<n; i++) {
57             for (int j=0; j<m; j++) {
58                 a[i][j] = sc.nextInt();
59             }
60         }
61         int ans = 0;
62         for (int x1=0; x1<n; x1++) {
63             for (int y1=0; y1<m; y1++) {
64                 if (a[x1][y1] != 0) continue;
65                 for (int x2=0; x2<n; x2++) {
66                     for (int y2=0; y2<m; y2++) {
67                         if (a[x2][y2] != 0) continue;
68                         for (int x3=0; x3<n; x3++) {
69                             for (int y3=0; y3<m; y3++) {
70                                 if (a[x3][y3] != 0) continue;
71                                 if (x1 == x2 && y1 == y2) continue;
72                                 if (x1 == x3 && y1 == y3) continue;
73                                 if (x2 == x3 && y2 == y3) continue;
74                                 a[x1][y1] = 1;
75                                 a[x2][y2] = 1;
76                                 a[x3][y3] = 1;
77                                 int cur = dfs();
78                                 if (ans < cur) ans = cur;
79                                 a[x1][y1] = 0;
80                                 a[x2][y2] = 0;
81                                 a[x3][y3] = 0;
82                             }
83                         }
84                     }
85                 }
86             }
87         }
88         System.out.println(ans);
89     }
90 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	17680 KB	740 ms	2743 B

C++14

```
1 #include <iostream>
2 #include <tuple>
3 #include <vector>
4 using namespace std;
5 int dx[]={0,1,0,-1};
6 int dy[]={1,0,-1,0};
7 void check(vector<vector<int>> &a, vector<vector<int>> &b, int x, int y, int dir) {
8     int n = a.size();
9     int m = a[0].size();
10    int i = x;
11    int j = y;
12    while((0 <= i && i < n && 0 <= j && j < m) {
13        if (a[i][j] == 6) break;
14        b[i][j] = a[x][y];
15        i += dx[dir];
16        j += dy[dir];
17    }
18 }
19 int go(vector<vector<int>> &a, vector<tuple<int,int,int>> &cctv, int index, vector<int> dirs) {
20     if (cctv.size() == index) {
21         vector<vector<int>> b(a);
22         for (int i=0; i<cctv.size(); i++) {
23             int what,x,y;
24             tie(what,x,y) = cctv[i];
25             if (what == 1) {
26                 check(a,b,x,y,dirs[i]);
27             } else if (what == 2) {
28                 check(a,b,x,y,dirs[i]);
29                 check(a,b,x,y,(dirs[i]+2)%4);
30             } else if (what == 3) {
31                 check(a,b,x,y,dirs[i]);
32                 check(a,b,x,y,(dirs[i]+1)%4);
33             } else if (what == 4) {
34                 check(a,b,x,y,dirs[i]);
35                 check(a,b,x,y,(dirs[i]+3)%4);
36                 check(a,b,x,y,(dirs[i]+2)%4);
37             } else if (what == 5) {
38                 check(a,b,x,y,dirs[i]);
39                 check(a,b,x,y,(dirs[i]+1)%4);
40                 check(a,b,x,y,(dirs[i]+2)%4);
41                 check(a,b,x,y,(dirs[i]+3)%4);
42             }
43         }
44         int cnt = 0;
45         int n = a.size();
46         int m = a[0].size();
47         for (int i=0; i<n; i++) {
48             for (int j=0; j<m; j++) {
49                 if (b[i][j] == 0)
50                     cnt += 1;
51             }
52         }
53         return cnt;
54     }
55     int ans = 100;
56     for (int i=0; i<4; i++) {
57         dirs[index] = i;
58         int temp = go(a, cctv, index+1, dirs);
59         if (ans > temp) {
60             ans = temp;
61         }
62     }
63     return ans;
64 }
65
66 int main() {
67     int n, m;
68     cin >> n >> m;
69     vector<vector<int>> a(n, vector<int>(m));
70     vector<tuple<int,int,int>> cctv;
71     vector<int> dirs;
72     for (int i=0; i<n; i++) {
73         for (int j=0; j<m; j++) {
74             cin >> a[i][j];
75             if (a[i][j] >= 1 && a[i][j] <= 5) {
76                 cctv.emplace_back(a[i][j],0,0);
77                 dirs.push_back(0);
78             }
79         }
80     }
81     cout << go(a, cctv, 0, dirs) << '\n';
82     return 0;
83 }
84
```



결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	52 ms	2379 B

Java

```
1 import java.util.*;
2 class CCTV {
3     public int x, y, type, dir;
4     CCTV(int x, int y, int type) {
5         this.x = x;
6         this.y = y;
7         this.type = type;
8         this.dir = 0;
9     }
10 }
11 public class Main {
12     static final int[] dx = {0,1,0,-1};
13     static final int[] dy = {1,0,-1,0};
14     static void check(int[][] a, int[][] b, int x, int y, int dir) {
15         int n = a.length, m = a[0].length;
16         int i = x, j = y;
17         while (0 <= i && i < n && 0 <= j && j < m) {
18             if (a[i][j] == 6) break;
19             b[i][j] = a[x][y];
20             i += dx[dir];
21             j += dy[dir];
22         }
23     }
24     static int go(int[][] a, ArrayList<CCTV> cctv, int index) {
25         if (index == cctv.size()) {
26             int n = a.length, m = a[0].length;
27             int[][] b = new int[n][m];
28             for (int i=0; i<n; i++) {
29                 for (int j=0; j<m; j++) {
30                     b[i][j] = a[i][j];
31                 }
32             }
33             for (CCTV c : cctv) {
34                 int what = c.type;
35                 int x = c.x, y = c.y;
36                 int dir = c.dir;
37                 if (what == 1) {
38                     check(a,b,x,y,dir);
39                 } else if (what == 2) {
40                     check(a,b,x,y,dir);
41                     check(a,b,x,y,(dir+2)%4);
42                 } else if (what == 3) {
43                     check(a,b,x,y,dir);
44                     check(a,b,x,y,(dir+1)%4);
45                 } else if (what == 4) {
46                     check(a,b,x,y,dir);
47                     check(a,b,x,y,(dir+1)%4);
48                     check(a,b,x,y,(dir+2)%4);
49                 } else if (what == 5) {
50                     check(a,b,x,y,dir);
51                     check(a,b,x,y,(dir+1)%4);
52                     check(a,b,x,y,(dir+2)%4);
53                     check(a,b,x,y,(dir+3)%4);
54                 }
55             }
56             int cnt = 0;
57             for (int i=0; i<n; i++) {
58                 for (int j=0; j<m; j++) {
59                     if (b[i][j] == 0) {
60                         cnt += 1;
61                     }
62                 }
63             }
64             return cnt;
65         }
66         int ans = 100;
67         for (int i=0; i<4; i++) {
68             cctv.get(index).dir = i;
69             int temp = go(a, cctv, index+1);
70             if (ans > temp) {
71                 ans = temp;
72             }
73         }
74         return ans;
75     }
76     public static void main(String[] args) {
77         Scanner sc = new Scanner(System.in);
78         int n = sc.nextInt();
79         int m = sc.nextInt();
80         int[][] a = new int[n][m];
81         ArrayList<CCTV> cctv = new ArrayList<>();
82         for (int i=0; i<n; i++) {
83             for (int j=0; j<m; j++) {
84                 a[i][j] = sc.nextInt();
85                 if (a[i][j] >= 1 && a[i][j] <= 5) {
86                     cctv.add(new CCTV(i, j, a[i][j]));
87                 }
88             }
89         }
90         System.out.println(go(a, cctv, 0));
91     }
92 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	56504 KB	536 ms	2909 B

C++14

```
1 #include <iostream>
2 #include <vector>
3 using namespace std;
4 int garo[100][100];
5 int w,h;
6 int start(int c) {
7     int r = 1;
8     while (r <= h) {
9         if (garo[r][c] == 1) {
10             c += 1;
11         } else if (garo[r][c] == 2) {
12             c -= 1;
13         }
14         r += 1;
15     }
16     return c;
17 }
18 bool go() {
19     for (int i=1; i<=w; i++) {
20         int res = start(i);
21         if (res != i) return false;
22     }
23     return true;
24 }
25 int main() {
26     int m;
27     cin >> w >> m >> h;
28     while (m--> 0) {
29         int x, y;
30         cin >> x >> y;
31         garo[x][y] = 1;
32         garo[x][y+1] = 2;
33     }
34     vector<pair<int,int>> a;
35     for (int i=1; i<=h; i++) {
36         for (int j=1; j<=w-1; j++) {
37             if (garo[i][j] == 0) continue;
38             if (garo[i][j+1] != 0) continue;
39             a.emplace_back(i,j);
40         }
41     }
42     int ans = -1;
43     if (go()) {
44         cout << 0 << '\n';
45         return 0;
46     }
47     int len = a.size();
48     for (int i=0; i<len; i++) {
49         int x1 = a[i].first;
50         int y1 = a[i].second;
51         if (garo[x1][y1] != 0 || garo[x1][y1+1] != 0) continue;
52         garo[x1][y1] = 1;
53         garo[x1][y1+1] = 2;
54         if (go()) {
55             (ans == -1 || ans > 1) {
56                 ans = 1;
57             }
58         }
59         for (int j=i+1; j<len; j++) {
60             int x2 = a[j].first;
61             int y2 = a[j].second;
62             if (garo[x2][y2] != 0 || garo[x2][y2+1] != 0) continue;
63             garo[x2][y2] = 1;
64             garo[x2][y2+1] = 2;
65             if (go()) {
66                 if (ans == -1 || ans > 2) {
67                     ans = 2;
68                 }
69             }
70             for (int k=j+1; k<len; k++) {
71                 int x3 = a[k].first;
72                 int y3 = a[k].second;
73                 if (garo[x3][y3] != 0 || garo[x3][y3+1] != 0) continue;
74                 garo[x3][y3] = 1;
75                 garo[x3][y3+1] = 2;
76                 if (go()) {
77                     if (ans == -1 || ans > 3) {
78                         ans = 3;
79                     }
80                 }
81                 garo[x3][y3] = 0;
82                 garo[x3][y3+1] = 0;
83             }
84             garo[x2][y2] = 0;
85             garo[x2][y2+1] = 0;
86         }
87         garo[x1][y1] = 0;
88         garo[x1][y1+1] = 0;
89     }
90     cout << ans << '\n';
91     return 0;
92 }
```

garo[r][c] == 1
(r,c) -> (r,c+1)
== 2
(r,c+1) -> (r,c)

가르쳐 보듯 풀음

2번 다시 놓음

4번

5번

6번

7번

8번

9번

10번

11번

12번

13번

14번

15번

16번

17번

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71번

72번

73번

74번

75번

76번

77번

78번

79번

80번

81번

82번

83번

84번

85번

86번

87번

88번

89번

90번

91번

92번

결과	메모리	시간	코드 길이
맞았습니다!!!	2028 KB	584 ms	2285 B

Java

```
1 import java.util.*;
2 class Pair {
3     int first;
4     int second;
5     Pair(int first, int second) {
6         this.first = first;
7         this.second = second;
8     }
9 }
10 public class Main {
11     static int[][] garo = new int[100][100];
12     static int w, h;
13     static int start(int c) {
14         int r = 1;
15         while (r <= h) {
16             if (garo[r][c] == 1) {
17                 c += 1;
18             } else if (garo[r][c] == 2) {
19                 c -= 1;
20             }
21             r += 1;
22         }
23         return c;
24     }
25     static boolean go() {
26         for (int i=1; i<=w; i++) {
27             int res = start(i);
28             if (res != i) return false;
29         }
30         return true;
31     }
32     public static void main(String[] args) {
33         Scanner sc = new Scanner(System.in);
34         int m;
35         w = sc.nextInt();
36         m = sc.nextInt();
37         h = sc.nextInt();
38         while (m-- > 0) {
39             int x = sc.nextInt();
40             int y = sc.nextInt();
41             garo[x][y] = 1;
42             garo[x][y+1] = 2;
43         }
44         ArrayList<Pair> temp = new ArrayList<>();
45         for (int i=1; i<=h; i++) {
46             for (int j=1; j<=w-1; j++) {
47                 if (garo[i][j] != 0) continue;
48                 if (garo[i][j+1] != 0) continue;
49                 temp.add(new Pair(i,j));
50             }
51         }
52         Pair[] a = temp.toArray(new Pair[temp.size()]);
53         int ans = -1;
54         if (go()) {
55             System.out.println(0);
56             System.exit(0);
57         }
58         int len = a.length;
59         for (int i=0; i<len; i++) {
60             int x1 = a[i].first;
61             int y1 = a[i].second;
62             if (garo[x1][y1] != 0 || garo[x1][y1+1] != 0) continue;
63             garo[x1][y1] = 1;
64             garo[x1][y1+1] = 2;
65             if (go()) {
66                 if (ans == -1 || ans > 1) {
67                     ans = 1;
68                 }
69             }
70             for (int j=i+1; j<len; j++) {
71                 int x2 = a[j].first;
72                 int y2 = a[j].second;
73                 if (garo[x2][y2] != 0 || garo[x2][y2+1] != 0) continue;
74                 garo[x2][y2] = 1;
75                 garo[x2][y2+1] = 2;
76                 if (go()) {
77                     if (ans == -1 || ans > 2) {
78                         ans = 2;
79                     }
80                 }
81                 for (int k=j+1; k<len; k++) {
82                     int x3 = a[k].first;
83                     int y3 = a[k].second;
84                     if (garo[x3][y3] != 0 || garo[x3][y3+1] != 0) continue;
85                     garo[x3][y3] = 1;
86                     garo[x3][y3+1] = 2;
87                     if (go()) {
88                         if (ans == -1 || ans > 3) {
89                             ans = 3;
90                         }
91                     }
92                     garo[x3][y3] = 0;
93                     garo[x3][y3+1] = 0;
94                 }
95                 garo[x2][y2] = 0;
96                 garo[x2][y2+1] = 0;
97             }
98             garo[x1][y1] = 0;
99             garo[x1][y1+1] = 0;
100         }
101         System.out.println(ans);
102     }
103 }
```

결과	메모리	시간	코드 길이
맞았습니다!!!	17392 KB	496 ms	3032 B

C++14

```
1 #include <iostream>
2 #include <tuple>
3 #include <vector>
4 #include <algorithm>
5 using namespace std;
6 int main() {
7     int n, m;
8     cin >> n >> m;
9     vector<vector<int>>> a(n, vector<int>(n));
10    vector<pair<int, int>>> people;
11    vector<pair<int, int>>> store;
12    for (int i=0; i<n; i++) {
13        for (int j=0; j<n; j++) {
14            cin >> a[i][j];
15            if (a[i][j] == 1) {
16                people.emplace_back(i, j);
17            } else if (a[i][j] == 2) {
18                store.emplace_back(i, j);
19            }
20        }
21    }
22    vector<int> d(store.size());
23    for (int i=0; i<m; i++) {
24        d[i] = 1;
25    }
26    sort(d.begin(), d.end());
27    int ans = -1;
28    do {
29        int sum = 0;
30        for (auto &p : people) {
31            vector<int> dists;
32            for (int i=0; i<store.size(); i++) {
33                if (d[i] == 0) continue;
34                auto &s = store[i];
35                int d1 = p.first-s.first;
36                int d2 = p.second-s.second;
37                if (d1 < 0) d1 = -d1;
38                if (d2 < 0) d2 = -d2;
39                int dist = d1+d2;
40                dists.push_back(dist);
41            }
42            sum += *min_element(dists.begin(), dists.end());
43        }
44        if (ans == -1 || ans > sum) {
45            ans = sum;
46        }
47    } while (next_permutation(d.begin(), d.end()));
48    cout << ans << '\n';
49    return 0;
50 }
```

결과	메모리	시간	코드 길이
맞았습니다!!!	1988 KB	28 ms	1369 B

Java

```
1 import java.util.*;
2 class Pair {
3     int first;
4     int second;
5     Pair(int first, int second) {
6         this.first = first;
7         this.second = second;
8     }
9 }
10 public class Main {
11     static boolean next_permutation(int[] a) {
12         int i = a.length-1;
13         while (i > 0 && a[i-1] >= a[i]) {
14             i -= 1;
15         }
16
17         if (i <= 0) {
18             return false;
19         }
20
21         int j = a.length-1;
22         while (a[j] <= a[i-1]) {
23             j -= 1;
24         }
25
26         int temp = a[i-1];
27         a[i-1] = a[j];
28         a[j] = temp;
29
30         j = a.length-1;
31         while (i < j) {
32             temp = a[i];
33             a[i] = a[j];
34             a[j] = temp;
35             i += 1;
36             j -= 1;
37         }
38         return true;
39     }
40     public static void main(String[] args) {
41         Scanner sc = new Scanner(System.in);
42         int n = sc.nextInt();
43         int m = sc.nextInt();
44         int[][] a = new int[n][n];
45         ArrayList<Pair> people = new ArrayList<>();
46         ArrayList<Pair> store = new ArrayList<>();
47         for (int i=0; i<n; i++) {
48             for (int j=0; j<n; j++) {
49                 a[i][j] = sc.nextInt();
50                 if (a[i][j] == 1) {
51                     people.add(new Pair(i,j));
52                 } else if (a[i][j] == 2) {
53                     store.add(new Pair(i,j));
54                 }
55             }
56         }
57         int[] d = new int[store.size()];
58         for (int i=0; i<m; i++) {
59             d[i] = 1;
60         }
61         Arrays.sort(d);
62         int ans = -1;
63         do {
64             int sum = 0;
65             for (Pair p : people) {
66                 int min = -1;
67                 for (int i=0; i<store.size(); i++) {
68                     if (d[i] == 0) continue;
69                     Pair s = store.get(i);
70                     int d1 = p.first-s.first;
71                     int d2 = p.second-s.second;
72                     if (d1 < 0) d1 = -d1;
73                     if (d2 < 0) d2 = -d2;
74                     int dist = d1+d2;
75                     if (min == -1 || min > dist) {
76                         min = dist;
77                     }
78                 }
79                 sum += min;
80             }
81             if (ans == -1 || ans > sum) {
82                 ans = sum;
83             }
84         } while (next_permutation(d));
85         System.out.println(ans);
86     }
87 }
```

결과	메모리	시간	코드 길이
맞았습니다!!!	18048 KB	324 ms	2316 B

C++14

```
1 #include <iostream>
2 #include <set>
3 using namespace std;
4 int n = 5;
5 int a[5][5];
6 set<int> ans;
7 int dx[] = {0,0,1,-1};
8 int dy[] = {1,-1,0,0};
9 void go(int x, int y, int num, int len) {
10     if (len == 6) {
11         ans.insert(num);
12         return;
13     }
14     for (int k=0; k<4; k++) {
15         int nx = x+dx[k];
16         int ny = y+dy[k];
17         if (0 <= nx && nx < n && 0 <= ny && ny < n) {
18             go(nx,ny,num*10+a[nx][ny],len+1);
19         }
20     }
21 }
22 int main() {
23     for (int i=0; i<n; i++) {
24         for (int j=0; j<n; j++) {
25             cin >> a[i][j];
26         }
27     }
28     for (int i=0; i<n; i++) {
29         for (int j=0; j<n; j++) {
30             go(i,j,a[i][j],1);
31         }
32     }
33     cout << ans.size() << '\n';
34 }
```

이동 방향 (x,y)

(x,y) → num

len

n² 정수

결과	메모리	시간	코드 길이
맞았습니다!!	2252 KB	0 ms	714 B

Java

```
1 import java.util.*;
2 public class Main {
3     static int[] dx = {0,-1,0,1};
4     static int[] dy = {1,0,-1,0};
5     static int n = 5;
6     static int[][] a = new int[5][5];
7     static HashSet<Integer> ans = new HashSet<>();
8     static void go(int x, int y, int num, int len) {
9         if (len == 6) {
10             ans.add(num);
11             return;
12         }
13         for (int k=0; k<4; k++) {
14             int nx = x+dx[k];
15             int ny = y+dy[k];
16             if (0 <= nx && nx < n && 0 <= ny && ny < n) {
17                 go(nx,ny,num*10+a[nx][ny],len+1);
18             }
19         }
20     }
21     public static void main(String[] args) {
22         Scanner sc = new Scanner(System.in);
23         for (int i=0; i<n; i++) {
24             for (int j=0; j<n; j++) {
25                 a[i][j] = sc.nextInt();
26             }
27         }
28         for (int i=0; i<n; i++) {
29             for (int j=0; j<n; j++) {
30                 go(i,j,a[i][j],1);
31             }
32         }
33         System.out.println(ans.size());
34     }
35 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	12536 KB	124 ms	988 B

C++14

```
1 #include <iostream>
2 #include <string>
3 using namespace std;
4 int n, m;
5 int a[100];
6 int calc(int i, string s) {
7     if (i + s.length() > n) return 0;
8     int base = a[i] - (s[0] - '0');
9     for (int j=0; j<s.length(); j++) {
10         if (base != a[i+j] - (s[j] - '0')) {
11             return 0;
12         }
13     }
14     return 1;
15 }
16 int main() {
17     cin >> n >> m;
18     for (int i=0; i<n; i++) {
19         cin >> a[i];
20     }
21     int ans = 0;
22     for (int i=0; i<n; i++) {
23         if (m == 1) {
24             ans += calc(i, "0") + calc(i, "000");
25         } else if (m == 2) {
26             ans += calc(i, "00");
27         } else if (m == 3) {
28             ans += calc(i, "001") + calc(i, "10");
29         } else if (m == 4) {
30             ans += calc(i, "100") + calc(i, "01");
31         } else if (m == 5) {
32             ans += calc(i, "000") + calc(i, "01") + calc(i, "101") + calc(i, "10");
33         } else if (m == 6) {
34             ans += calc(i, "000") + calc(i, "00") + calc(i, "011") + calc(i, "20");
35         } else if (m == 7) {
36             ans += calc(i, "000") + calc(i, "00") + calc(i, "110") + calc(i, "02");
37         }
38     }
39     cout << ans << '\n';
40     return 0;
41 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	0 ms	1148 B

Java

```
1 import java.util.*;
2 public class Main {
3     static int[] a;
4     static int n, m;
5     static int calc(int i, String s) {
6         if (i + s.length() > n) return 0;
7         int base = a[i] - (s.charAt(0) - '0');
8         for (int j=0; j<s.length(); j++) {
9             if (base != a[i+j] - (s.charAt(j) - '0')) {
10                 return 0;
11             }
12         }
13         return 1;
14     }
15     public static void main(String[] args) {
16         Scanner sc = new Scanner(System.in);
17         n = sc.nextInt();
18         m = sc.nextInt();
19         a = new int[n];
20         for (int i=0; i<n; i++) {
21             a[i] = sc.nextInt();
22         }
23         int ans = 0;
24         for (int i=0; i<n; i++) {
25             if (m == 1) {
26                 ans += calc(i, "0") + calc(i, "0000");
27             } else if (m == 2) {
28                 ans += calc(i, "00");
29             } else if (m == 3) {
30                 ans += calc(i, "001") + calc(i, "10");
31             } else if (m == 4) {
32                 ans += calc(i, "100") + calc(i, "01");
33             } else if (m == 5) {
34                 ans += calc(i, "000") + calc(i, "01") + calc(i, "101") + calc(i, "10");
35             } else if (m == 6) {
36                 ans += calc(i, "000") + calc(i, "00") + calc(i, "011") + calc(i, "20");
37             } else if (m == 7) {
38                 ans += calc(i, "000") + calc(i, "00") + calc(i, "110") + calc(i, "02");
39             }
40         }
41         System.out.println(ans);
42     }
43 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	11464 KB	116 ms	1435 B

C++14

```
1 #include <iostream>
2 using namespace std;
3 int n;
4 int a[401][801];
5 int s[401][801];
6 int ans = 0;
7 void calc(int row, int left, int right, int sum) {
8     if (row < 1 || row > n) return;
9     if (left < 1 || right > 2*row-1) return;
10    sum += s[row][right] - s[row][left-1];
11    if (sum > ans) ans = sum;
12    if (left % 2 == 0) {
13        calc(row-1, left-2, right, sum);
14    } else {
15        calc(row+1, left, right+2, sum);
16    }
17 }
18 int main() {
19     for (int tc=1;; tc++) {
20         cin >> n;
21         if (n == 0) break;
22         ans = -100000;
23         for (int i=1; i<=n; i++) {
24             for (int j=1; j<=2*i-1; j++) {
25                 cin >> a[i][j];
26                 s[i][j] = s[i][j-1] + a[i][j];
27             }
28         }
29         for (int i=1; i<=n; i++) {
30             for (int j=1; j<=2*i-1; j++) {
31                 calc(i, j, j, 0);
32             }
33         }
34         cout << tc << ". " << ans << '\n';
35     }
36     return 0;
37 }
```

(row, left) (row+1, right)

①

②

③

④

결과	메모리	시간	코드 길이
맞았습니다!!	4496 KB	176 ms	918 B

Java

```
1 import java.util.*;
2 public class Main {
3     static int n;
4     static int[][] a = new int[401][801];
5     static int[][] s = new int[401][801];
6     static int ans;
7     static void calc(int row, int left, int right, int sum) {
8         if (row < 1 || row > n) return;
9         if (left < 1 || right > 2*row-1) return;
10        sum += s[row][right] - s[row][left-1];
11        if (sum > ans) ans = sum;
12        if (left % 2 == 0) {
13            calc(row-1, left-2, right, sum);
14        } else {
15            calc(row+1, left, right+2, sum);
16        }
17    }
18    public static void main(String[] args) {
19        Scanner sc = new Scanner(System.in);
20        for (int tc=1;; tc++) {
21            n = sc.nextInt();
22            if (n == 0) break;
23            ans = -100000;
24            for (int i=1; i<=n; i++) {
25                for (int j=1; j<=2*i-1; j++) {
26                    a[i][j] = sc.nextInt();
27                    s[i][j] = s[i][j-1] + a[i][j];
28                }
29            }
30            for (int i=1; i<=n; i++) {
31                for (int j=1; j<=2*i-1; j++) {
32                    calc(i, j, j, 0);
33                }
34            }
35            System.out.printf("%d. %d\n",tc, ans);
36        }
37    }
38 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	102248 KB	1096 ms	1193 B

C++14

```
1 #include <iostream>
2 using namespace std;
3 int a[10];
4 bool d[360];
5 int main() {
6     int n, m;
7     cin >> n >> m;
8     for (int i=0; i<n; i++) {
9         cin >> a[i];
10    }
11    d[0] = true;
12    for (int i=0; i<n; i++) {
13        for (int k=0; k<360; k++) {
14            for (int j=0; j<360; j++) {
15                if (d[j] == false) continue;
16                d[(j-a[i]+360)%360] = true;
17                d[(j+a[i])%360] = true;
18            }
19        }
20    }
21    while (m--) {
22        int x;
23        cin >> x;
24        cout << (d[x] ? "YES" : "NO") << '\n';
25    }
26    return 0;
27 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	0 ms	569 B

Java

```
1 import java.util.*;
2 public class Main {
3     public static void main(String[] args) {
4         Scanner sc = new Scanner(System.in);
5         int n = sc.nextInt();
6         int m = sc.nextInt();
7         int[] a = new int[n];
8         for (int i=0; i<n; i++) {
9             a[i] = sc.nextInt();
10        }
11        boolean[] d = new boolean[360];
12        d[0] = true;
13        for (int i=0; i<n; i++) {
14            for (int k=0; k<360; k++) {
15                for (int j=0; j<360; j++) {
16                    if (d[j] == false) continue;
17                    d[(j-a[i]+360)%360] = true;
18                    d[(j+a[i])%360] = true;
19                }
20            }
21        }
22        while (m-- > 0) {
23            int x = sc.nextInt();
24            System.out.println(d[x] ? "YES" : "NO");
25        }
26    }
27 }
```

결과	메모리	시간	코드 길이
맞았습니다!!	11920 KB	140 ms	789 B

C++14

```
1 #include <iostream>
2 using namespace std;
3 bool c[20*100000+10];
4 int a[20];
5 int n;
6 int main() {
7     cin >> n;
8     for (int i=0; i<n; i++) {
9         cin >> a[i];
10    }
11    for (int i=0; i<(1<<n); i++) {
12        int sum = 0;
13        for (int j=0; j<n; j++) {
14            if (i&(1<<j)) {
15                sum += a[j];
16            }
17        }
18        c[sum] = true;
19    }
20    for (int i=1; i<n; i++) {
21        if (c[i] == false) {
22            cout << i << '\n';
23            break;
24        }
25    }
26    return 0;
27 }
28
```

$C[i] = T^2$
부분수열의 합
가능 + / -

$\overbrace{000000}^n$

(1111)

①

결과	메모리	시간	코드 길이
맞았습니다!!	3936 KB	60 ms	529 B

Java

```
1 import java.util.*;
2 public class Main {
3     public static void main(String args[]) {
4         Scanner sc = new Scanner(System.in);
5         boolean[] c = new boolean[20*100000+10];
6         int[] a = new int[20];
7         int n = sc.nextInt();
8         for (int i=0; i<n; i++) {
9             a[i] = sc.nextInt();
10        }
11        for (int i=0; i<(1<<n); i++) {
12            int sum = 0;
13            for (int j=0; j<n; j++) {
14                if ((i&(1<<j)) != 0) {
15                    sum += a[j];
16                }
17            }
18            c[sum] = true;
19        }
20        for (int i=1; i<n; i++) {
21            if (c[i] == false) {
22                System.out.println(i);
23                break;
24            }
25        }
26    }
27 }
28
```

결과	메모리	시간	코드 길이
맞았습니다!!	13740 KB	228 ms	744 B

C++14

```
1 #include <iostream>
2 using namespace std;
3 int n, m;
4 string a[20];
5 int dx[] = {0,0,1,-1};
6 int dy[] = {1,-1,0,0};
7 int go(int step, int x1, int y1, int x2, int y2) {
8     if (step == 11) return -1;
9     bool fall1=false, fall2=false;
10    if (x1 < 0 || x1 >= n || y1 < 0 || y1 >= m) fall1 = true;
11    if (x2 < 0 || x2 >= n || y2 < 0 || y2 >= m) fall2 = true;
12    if (fall1 && fall2) return 1;
13    if (fall1 || fall2) return step;
14    int ans = -1;
15    for (int k=0; k<4; k++) {
16        int nx1 = x1+dx[k];
17        int ny1 = y1+dy[k];
18        int nx2 = x2+dx[k];
19        int ny2 = y2+dy[k];
20        if (0 <= nx1 && nx1 < n && 0 <= ny1 && ny1 < m && a[nx1][ny1] == '#') {
21            nx1 = x1;
22            ny1 = y1;
23        }
24        if (0 <= nx2 && nx2 < n && 0 <= ny2 && ny2 < m && a[nx2][ny2] == '#') {
25            nx2 = x2;
26            ny2 = y2;
27        }
28
29        int temp = go(step+1, nx1, ny1, nx2, ny2);
30        if (temp == -1) continue;
31        if (ans == -1 || ans > temp) {
32            ans = temp;
33        }
34    }
35    return ans;
36 }
37 int main() {
38     cin >> n >> m;
39     int x1,y1,x2,y2;
40     x1=y1=x2=y2=-1;
41     for (int i=0; i<n; i++) {
42         cin >> a[i];
43         for (int j=0; j<m; j++) {
44             if (a[i][j] == 'o') {
45                 if (x1 == -1) {
46                     x1 = i;
47                     y1 = j;
48                 } else {
49                     x2 = i;
50                     y2 = j;
51                 }
52                 a[i][j] = '.';
53             }
54         }
55     }
56     cout << go(0,x1,y1,x2,y2) << '\n';
57     return 0;
58 }
59
```

1번: (x₁, y₁)
2번: (x₂, y₂)

결과

맞았습니다!!	메모리 1988 KB	시간 52 ms	코드 길이 1597 B
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Java

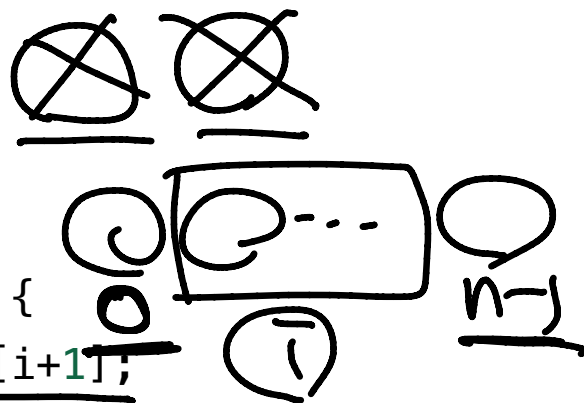
```
1 import java.util.*;
2 public class Main {
3     static int n, m;
4     static char[][] a;
5     static final int[] dx = {0,0,1,-1};
6     static final int[] dy = {1,-1,0,0};
7     static int go(int step, int x1, int y1, int x2, int y2) {
8         if (step == 11) return -1;
9         boolean fall1 = false;
10        boolean fall2 = false;
11        if (x1 < 0 || x1 >= n || y1 < 0 || y1 >= m) fall1 = true;
12        if (x2 < 0 || x2 >= n || y2 < 0 || y2 >= m) fall2 = true;
13        if (fall1 && fall2) return -1;
14        if (fall1 || fall2) return step;
15        int ans = -1;
16        for (int k=0; k<4; k++) {
17            int nx1 = x1+dx[k];
18            int ny1 = y1+dy[k];
19            int nx2 = x2+dx[k];
20            int ny2 = y2+dy[k];
21            if (0 <= nx1 && nx1 < n && 0 <= ny1 && ny1 < m && a[nx1][ny1] == '#') {
22                nx1 = x1;
23                ny1 = y1;
24            }
25            if (0 <= nx2 && nx2 < n && 0 <= ny2 && ny2 < m && a[nx2][ny2] == '#') {
26                nx2 = x2;
27                ny2 = y2;
28            }
29
30            int temp = go(step+1, nx1, ny1, nx2, ny2);
31            if (temp == -1) continue;
32            if (ans == -1 || ans > temp) {
33                ans = temp;
34            }
35        }
36        return ans;
37    }
38    public static void main(String[] args) {
39        Scanner sc = new Scanner(System.in);
40        n = sc.nextInt();
41        m = sc.nextInt();
42        a = new char[n][m];
43        int x1,y1,x2,y2;
44        x1=y1=x2=y2=-1;
45        for (int i=0; i<n; i++) {
46            a[i] = sc.next().toCharArray();
47            for (int j=0; j<m; j++) {
48                if (a[i][j] == 'o') {
49                    if (x1 == -1) {
50                        x1 = i;
51                        y1 = j;
52                    } else {
53                        x2 = i;
54                        y2 = j;
55                    }
56                    a[i][j] = '.';
57                }
58            }
59        }
60        System.out.println(go(0,x1,y1,x2,y2));
61    }
62 }
63
```

결과

맞았습니다!!	메모리 13128 KB	시간 276 ms	코드 길이 2016 B
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C++14

```
1 #include <iostream>
2 #include <vector>
3 using namespace std;
4 int go(vector<int> &a) {
5     int n = a.size();
6     if (n == 2) return 0;
7     int ans = 0;
8     for (int i=1; i<n-1; i++) {
9         int energy = a[i-1]*a[i+1];
10        vector<int> b(a);
11        b.erase(b.begin()+i);
12        energy += go(b);
13        if (ans < energy) {
14            ans = energy;
15        }
16    }
17    return ans;
18 }
19 int main() {
20     int n;
21     cin >> n;
22     vector<int> a(n);
23     for (int i=0; i<n; i++) {
24         cin >> a[i];
25     }
26     cout << go(a) << '\n';
27     return 0;
28 }
29
```



결과	메모리	시간	코드 길이
맞았습니다!!	1988 KB	8 ms	574 B

Java

```
1 import java.util.*;
2 public class Main {
3     static int go(ArrayList<Integer> a) {
4         int n = a.size();
5         if (n == 2) return 0;
6         int ans = 0;
7         for (int i=1; i<n-1; i++) {
8             int energy = a.get(i-1)*a.get(i+1);
9             ArrayList<Integer> b = new ArrayList<>(a);
10            b.remove(i);
11            energy += go(b);
12            if (ans < energy) {
13                ans = energy;
14            }
15        }
16        return ans;
17    }
18    public static void main(String[] args) {
19        Scanner sc = new Scanner(System.in);
20        int n = sc.nextInt();
21        ArrayList<Integer> a = new ArrayList<>();
22        for (int i=0; i<n; i++) {
23            a.add(sc.nextInt());
24        }
25        System.out.println(go(a));
26    }
27 }
28
29
```

결과	메모리	시간	코드 길이
맞았습니다!!	20780 KB	176 ms	783 B

끝

코드 플러스

<https://code.plus>

- 슬라이드에 포함된 소스 코드를 보려면 "정보 수정 > 백준 온라인 저지 연동"을 통해 연동한 다음, "백준 온라인 저지"에 로그인해야 합니다.
- 강의 내용에 대한 질문은 코드 플러스의 "질문 게시판"에서 할 수 있습니다.
- 문제와 소스 코드는 슬라이드에 첨부된 링크를 통해서 볼 수 있으며, "백준 온라인 저지"에서 서비스됩니다.
- 슬라이드와 동영상 강의는 코드 플러스 사이트를 통해서만 볼 수 있으며, 동영상 강의의 녹화와 다운로드, 배포와 유통은 저작권법에 의해서 금지되어 있습니다.
- 다른 경로로 이 슬라이드나 동영상 강의를 본 경우에는 codeplus@startlink.io 로 이메일 보내주세요.
- 강의 내용, 동영상 강의, 슬라이드, 첨부되어 있는 소스 코드의 저작권은 스타트링크와 최백준에게 있습니다.